

CLAIMS

1. A video image type determination system comprising:
 - a video image input section which inputs a video image photographed by a mobile video image photographing device;
 - 5 a moving feature variable obtaining section which obtains a moving feature variable indicating a feature of said video image photographing device in a state of moving;
 - and
 - a video image type determining section which
- 10 determines a type of a video image scene included in said video image on the basis of said moving feature variable.

2. A video image processing system comprising:
 - a video image input section which inputs a video image photographed by a mobile video image photographing device;
 - 15 a moving feature variable obtaining section which obtains a moving feature variable indicating a feature of said video image photographing device in a state of moving;
 - a video image type determining section which
- 20 determines a type of a video image scene included in said video image on the basis of said moving feature variable;
- and
- a video image processing section which determines a processing method of said video image on the basis of said
- 25 type of said video image scene determined by said video image type determining section, and processes said video image on the basis of said determined processing method.

3. The video image processing system according to claim 2, further comprising:

10 a display section which displays said video image 5 which is processed by said video image processing section.

4. The video image processing system according to claim 2 or 3, wherein said moving feature variable obtaining section includes:

15 a speed input section which obtains a moving speed of said video image photographing device,

20 a first position input section which obtains a photographing position of said video image photographing device, and

25 a moving feature variable calculating section which calculates a moving feature variable corresponding to said video image scene on the basis of said photographing position and said moving speed.

30 5. The video image processing system according to claim 4, further comprising:

35 a route information memory section which stores route information,

40 wherein said moving feature variable calculating section calculates said moving feature variable corresponding to said video image scene on the basis of said route information, and said photographing position

and said moving speed of said video image photographing device.

6. The video image processing system according to claim 5, wherein the route information includes at least any one of a route position, type, a number of lanes, a position of an intersection, a position of a junction, and existence of a signal.

10 7. The video image processing system according to any of claims 2 to 6, wherein said moving feature variable includes at least any one of a deviation variable between a current position of said video image photographing device and a predetermined route, a running speed, and a running 15 straight variable.

8. The video image processing system according to any of claims 2 to 7 further comprising:

20 a landmark feature variable obtaining section which obtains a landmark feature variable indicating a feature of a landmark existing within a viewing angle of said video image,

25 wherein said video image type determining section determines said type of said video image scene on the basis of said landmark feature variable and said moving feature variable.

9. The video image processing system according to claim 8, wherein said landmark feature variable obtaining section includes:

5 a direction input section which obtains said photographing direction of said video image photographing device,

a second position input section which obtains said photographing position of said video image photographing device,

10 a landmark information memory section which stores landmark information including property information of said landmark, and

a landmark feature variable calculating section which calculates said landmark feature variable 15 corresponding to said video image scene on the basis of said landmark information, said photographing position, and said photographing direction.

10. The video image processing system according to claim 20 9, wherein said landmark information includes a position and a form of said landmark.

11. The video image processing system according to any of claims 8 to 10, wherein said landmark feature variable 25 includes at least any one of a size of said landmark on a screen and a deviation variable from a screen center.

12. The video image processing system according to any
of claims 8 to 11, wherein said video image type determining
section determines said type of said video image scene by
determining whether or not said moving feature variable
5 and said landmark feature variable are larger than
threshold values.

13. The video image processing system according to claim
12, wherein said threshold values with respect to said
10 moving feature variable and said landmark feature variable
are changed depending on a usage purpose.

14. The video image processing system according to any
of claims 8 to 12, wherein said video image type determining
15 section calculates an importance level of said video image
scene on the basis of at least one of values among said
moving feature variable and said landmark feature variable,
and determines said type of said video image scene when
said calculated importance level is larger than a threshold
20 value.

15. The video image processing system according to any
of claims 2 to 14, wherein said video image processing
section exclusively processes said video image of a
25 specific video image scene.

16. The video image processing system according to claim

3, wherein said display section displays a map including a position in which said video image is photographed while displaying said video image.

5 17. The video image processing system according to claim 3, wherein said display section includes a user interface for a user to set and input said usage purpose of said video image.

10 18. The video image processing system according to any of claims 2 to 17, wherein said type of said video image scene includes at least one of a turning corner scene, a landmark scene, a traffic congestion scene, a signal waiting scene, and other scene.

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19. The video image processing system according to claim 18, wherein said video image processing section processes said video image so as to perform a slow replay in said video image scene which is determined as said turning corner scene, processes said video image so as to display a ticker of said landmark information in said video image scene which is determined as said landmark scene, processes said video image so as to delete said video image scene which is determined as said traffic congestion scene, processes said video image so as to delete a video image scene which is determined as said signal waiting scene, and processes said video image so as to perform a high-speed

replay in said video image scene which is determined as said other scene.

20. A server of a video image processing system which 5 processes a video image photographed by a video image photographing device, said server comprising:

 a landmark information memory section which memorizes landmark information including property information of a landmark;

10 a landmark feature variable calculating section which calculates a landmark feature variable corresponding to a video image scene on the basis of said landmark information, and a photographing position and a photographing direction of said video image photographing 15 device received from a terminal;

 a route information memory section which memorizes route information;

 a moving feature variable calculating section which calculates a moving feature variable corresponding to said 20 video image scene on the basis of said route information, and said photographing position and said moving speed of said video image photographing device received from said terminal;

 a video image type determining section which 25 determines a type of said video image scene on the basis of said landmark feature variable and said moving feature variable;

a video image processing section which determines a processing method of said video image on the basis of said type of said video image scene, and processes said video image on the basis of said determined processing method;
5 and

a server-side transmission section which transmits said video image processed by said video image processing section to said terminal via a communication network.

10 21. A server of a video image processing system which processes a video image photographed by a video image photographing device, said server comprising:

a landmark information memory section which memorizes landmark information including property
15 information of a landmark;

a landmark feature variable calculating section which calculates a landmark feature variable corresponding to a video image scene on the basis of said landmark information, and a photographing position and a
20 photographing direction of said video image photographing device received from a terminal;

a route information memory section which memorizes route information,

a moving feature variable calculating section which
25 calculates a moving feature variable corresponding to said video image scene on the basis of said route information, and said photographing position and said moving speed of

said video image photographing device received from said terminal,

a video image type determining section which determines a type of said video image scene on the basis 5 of said landmark feature variable and said moving feature variable, and

a server-side transmission section which transmits said type of said video image scene to said terminal via a communication network.

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22. A terminal of a video image processing system which processes a video image photographed by a video image photographing device, said terminal comprising:

a video image input section which inputs said video 15 image;

a direction input section which inputs a photographing direction of said video image photographing device;

a position input section which inputs a photographing 20 position of said video image photographing device;

a speed input section which inputs a moving speed of said video image photographing device;

a terminal-side transmission section which transmits said video image, said photographing direction, said 25 photographing position and said moving speed to a server that processes said video image via a communication network; and

a video image display section which displays said processed video image received from said server.

23. A terminal of a video image processing system which 5 processes a video image photographed by a video image photographing device, said terminal comprising:

a video image input section which inputs said video image;

10 a direction input section which inputs a photographing direction of said video image photographing device;

a position input section which inputs a photographing position of said video image photographing device;

15 a speed input section which inputs a moving speed of said video image photographing device;

a terminal-side transmission section which transmits said photographing direction, said photographing position and said moving speed to a server that determines a type of a video image scene via a communication network;

20 a video image processing section which determines a method to process said video image on the basis of said type of said video image scene received from said server, and processes said video image on the basis of said determined processing method; and

25 a video image display section which displays said video image processed by said video image processing section.

24. A video image type determination method comprising:
 inputting a video image photographed by a mobile
 video image photographing device;
5 obtaining a moving feature variable indicating a
 feature of said video image photographing device in a state
 of moving; and
 determining a type of a video image scene included
 in said video image on the basis of said moving feature
10 variable.

25. A video image processing method comprising:
 inputting a video image photographed by a mobile
 video image photographing device;
15 obtaining a moving feature variable indicating a
 feature of said video image photographing device in a state
 of moving;
 determining a type of a video image scene included
 in said video image on the basis of said moving feature
20 variable; and
 determining a processing method of said video image
 on the basis of said type of said video image scene, and
 processing said video image on the basis of said determined
 processing method.

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26. The video image processing method according to claim
25, further comprising:

displaying said processed video image.

27. The video image processing method according to claim
25 or 26, further comprising

5 obtaining a landmark feature variable indicating a
feature of a landmark existing within a viewing angle of
said video image,

 wherein said type of said video image scene is
determined on the basis of said landmark feature variable
10 and said moving feature variable in said determining.

28. A video image type determination program comprising
code that, when executed, causes a computer to perform:

 inputting a video image photographed by a mobile
15 video image photographing device;

 obtaining a moving feature variable indicating a
feature of said video image photographing device in a state
of moving; and

 determining a type of a video image scene included
20 in said video image on the basis of said moving feature
variable.

29. A video image processing program comprising code that,
when executed, causes a computer to perform:

25 inputting a video image photographed by a mobile
video image photographing device;

 obtaining a moving feature variable indicating a

feature of said video image photographing device in a state of moving;

5 determining a type of a video image scene included in said video image on the basis of said moving feature variable; and

determining a method to process said video image on the basis of said type of said video image scene, and processing said video image on the basis of said determined processing method.

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30. The video image processing program according to claim 29 further comprising code that, when executed, causes the computer to perform:

displaying said processed video image.

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31. The video image processing program according to claim 29 or 30, further comprising code that, when executed, causes the computer to perform:

20 obtaining a landmark feature variable indicating a feature of a landmark existing within a viewing angle of said video image,

wherein said type of said video image scene is determined on the basis of said landmark feature variable and said moving feature variable in said determining.